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# Public Utility Commission of Texas

W. Lane Lanford
Executive Director

January 11, 2001

Honorable Members of the Seventy-Seventh Texas Legislature:

We are pleased to submit our 2001 Report on the Scope of Competition in Telecommunications Markets, as required by Section 52.006 of the Public Utility Regulatory Act (PURA).

Since we issued our previous report on telecommunications competition in January 1999, the Commission has continued to make significant progress in managing the transition to competitive local telecommunications markets. Numerous new providers have entered the market, and the market share held by competitive providers has increased significantly. Recent developments, however, have shown that some of the new providers are having difficulties staying in the residential local exchange market.

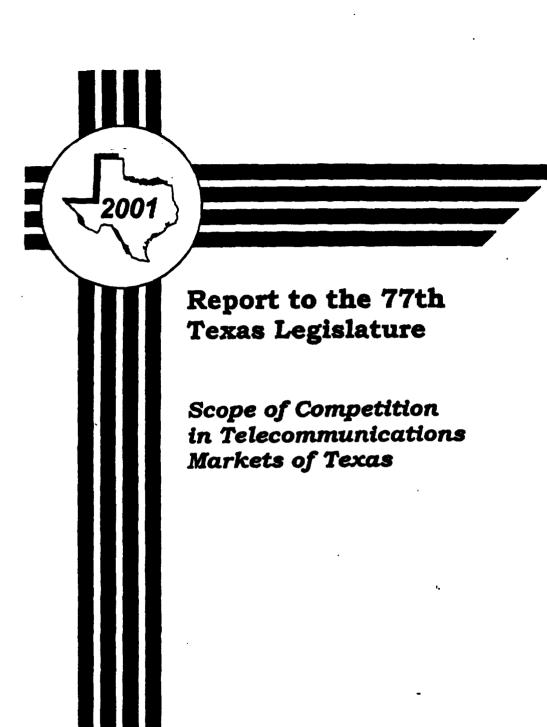
In the four largest metro areas of Texas, facilities-based competitors have developed increased capacity for long-run competition with incumbent providers. As a result, the market for business customers in these metro areas has strong potential for genuine competition, although market penetration levels are too low to conclude that full competition has arrived. Whether residential and rural customers will have competitive choices is more uncertain.

Chapter 6 presents an economic diagnosis for why residential and rural customers have largely been left behind in the move to competition. The regulatory tradition of maintaining low (often below cost) rates for residential local telephone service is the key reason. As outlined in the Executive Summary and discussed in its first legislative recommendation, the Commission presents the Texas Legislature with several alternative strategies to create greater opportunity for residential and rural customers to benefit from local exchange competition.

We look forward to continuing to work with you on this and other policy objectives. If you need additional information about any issues addressed in the report, please call on us.

Sincerely,

Pat Wood, III Chairman Judy W. Walsh Commissioner Brett A. Perlman
Commissioner



Public Utility Commission of Texas

January 2001

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## **EXECUTIVE SUMMARY**

Competitive local exchange carriers now have the regulatory framework to challenge Southwestern Bell and Verizon for market share in Texas. The Public Utility Commission of Texas (Commission) has certified several hundred new entrants, and those in operation have gained visible market share. While the potential for genuine competition is strong for some markets in Texas, it is less likely to flourish in others. At this time, residential and rural customers are better served by existing price cap regulation of traditional nonbasic local service until more viable and sustainable competitive choices become available to them. The Commission recommends finding the proper balance between protecting residential customers in the short run and promoting competition in the long run for the local exchange residential market.

### **Progress in Local Exchange Competition**

During the last few years, the Commission successfully implemented federal and state legislation to open the service territories of the incumbent local exchange carriers. and competitors have responded to the opportunity. As part of the proceedings that led to the approval of Southwestern Bell's application to enter the long distance market, the Commission approved the Texas 271 Interconnection Agreement (T2A), which provides for a standardized, efficient, and quick way for competitors to enter Southwestern Bell's service territories. The availability of such an agreement is a necessary first step to facilitate the entrance of new competitors into the marketplace. Sprint has voluntarily agreed to develop a standard agreement, but other incumbent local exchange carriers those serving primarily rural areas - are not similarly situated due to the federal exemption for rural carriers from most competition-related requirements. Survey data show that, as of the end of 1999, competitive providers rapidly gained market share in local telephony, as measured in telephone lines operated and in revenues earned. Market penetration is highest in the large metro and suburban areas of Austin, Dallas, Houston, and San Antonio, with more than 30 competitive providers in each metro area by late 2000. Many smaller and medium-sized metro areas, such as Abilene, Beaumont, and Longview, had six to ten competitive providers offering services. Market penetration by competitors in rural areas is very limited, although increasing relative to 1997.

Competitors gained market share among business customers more than among residential customers. Facilities-based competition in the four largest metro areas has provided increased capacity for competitors to compete with incumbent providers in the long run. As a result, the market for business customers in the large metro areas of Texas has strong potential for genuine competition, although the levels of market penetration as of 1999 are too low to declare that full competition has arrived. Whether residential and rural customers will have sustainable competitive choices in the near future is less certain.

Events in the year 2000 have changed conditions for local exchange competition in Texas and across the nation. Competitive local exchange company (CLEC or competitor) stocks have seen a slump in share prices. AT&T, Sprint, and Worldcom announced major company reorganizations with decreased focus on serving residential mass markets. These events suggest that competitors may be heading for a period of consolidation – between companies and within markets. A number of key competitors that were expected to challenge Southwestern Bell and Verizon now seem to be limiting their entry into general residential voice markets.

Because Southwestern Bell can now compete for long distance customers in Texas, the company has made a strong push in 2000 to bundle its offerings to provide residential customers with various options for "one-stop shopping." Using the pricing and packaging flexibility that SB 560 provided, Southwestern Bell raised prices on the majority of its vertical (nonbasic) telephone services for both residential and business customers while lowering prices for nearly a third of those services listed in this report. Southwestern Bell also gained a sizeable portion of the long distance market just months after offering long distance service for the first time. Southwestern Bell's largest and strongest competitors have not been offering substantial competition in vertical services or in bundling local residential services with long distance or other services and have lost market share in long distance service.

While opportunities are in place for CLECs to compete in most areas of Texas, the Commission recognizes that differences in customer characteristics and population density among various regions of Texas affect where CLECs decide they can profitably compete and the type of customers they serve. The willingness of the incumbent local exchange company to work with CLECs is also a factor. At the same time, cross-subsidies that have traditionally kept residential rates artificially low now contribute to the lack of competition for residential customers. The same cross-subsidies have provided cream-skimming opportunities in large metro and business markets.

While the possibilities of competition for local service using traditional wireline are mixed at best, technology is reshaping the competitive landscape of telecommunications. New technologies such as cable, wireless, satellite, and voice over Internet Protocol likely will create new avenues and providers for customers to receive traditional local and long distance voice services, profoundly changing the market structure from the customers' point of view at some point in the future.

### **Next Step for Local Competition in Texas**

The 2001 Scope of Competition Report summarizes the path taken to open century-old monopolies as well as the use of new tools for facilitating competition that the Texas Legislature provided last session. As detailed above, the response has been good in some markets and disappointing in others. The conclusion today is that competition looks viable in the business and urban markets, but may not be as viable for certain rural and residential customers. The Report offers an economic diagnosis for why this pattern has developed, with the primary causes rooted in underlying market conditions and in the historical regulatory pricing system for local telephone service.

Texas has had a long-standing public policy to provide universal service and to maintain low rates for basic residential local service. However, continuing this policy means that some segments of the market may not receive rates that reflect the true cost of the service. In the short term, these segments - most notably residential and rural customers - may need protection from price increases if the market does not effectively moderate them. Indeed, further action may be necessary to ensure that competition comes to these markets at all. The Commission recognizes that short-term remedies are not long-term solutions in regulating a telecommunications industry that is rapidly evolving away from selling simple voice service.

There are a number of ways Texas can go from here. Approaches can be passive or active. The Commission suggests that the Legislature consider the following options for addressing the lack of competition in Texas local residential and rural markets:

### Option A: Passive Erosion (no change to current pricing structures).

This is the de facto policy now in effect. If the market is left to behave under current policies, residential customers will continue to have low rates for basic service, but incumbent carriers likely will raise rates further on nonbasic services with little competition under the pricing flexibility granted in SB 560. The economic term for the process of aligning rates to reflect actual costs is called rebalancing. A benefit of allowing these rates to rise is that higher rates for the total set of residential services (even with basic service rates held artificially low) would provide CLECs incentives to offer competitive bundled service packages and to bring new technologies to more areas of Texas. As a result, CLECs may be able to erode the market share of incumbents over the long term.

However, a likely consequence of this approach is that CLECs will serve profitable high-end residential customers and the remaining customers, especially lowend residential and rural customers, may experience price increases for commonly used services for which there are no affordable substitutes at this time. So, while the bundled price of residential telephone services may move closer to its true cost for some customers, the burden of rebalancing prices would continue to be borne by the vertical services user, while basic local services remain subsidized below true cost. From the public's point-of-view, this arrangement may be preferable to having that burden be borne by all residential dial-tone customers.

# Option B: Place a temporary, two-year price cap on popular nonbasic residential services that do not currently have competition, and evaluate whether further steps are necessary at the close of the cap to ensure competition in these markets.

This option borrows from both laissez-faire and regulatory economics. Placing caps on residential call forwarding, caller ID, and call return, - the prices of which have increased substantially since SB 560 became effective - would moderate the burden borne by residential customers during the transition to competition for local exchange markets.

Most residential and rural customers receive basic local services at rates well below their true cost (with the remainder of the cost subsidized by Texas and federal universal service payments and over-priced vertical or nonbasic services). The best hope many of these customers have for competition is from alternate technologies – such as wireless, satellite, or cable – that are not yet cost-competitive with landline basic local service. Landline local exchange competitors may never be competitive with incumbent-provided basic local service at current, subsidized rates. Therefore, the primary benefit of price caps on nonbasic services would be to temporarily protect residential customers from further price increases for services that have already seen large price increases. Such a strategy would allow the opportunity to see if the bundled local service package is priced high enough to allow more competitors to serve more residential and rural customers.

A disadvantage of this approach is that competitive providers need sufficient profit to fight for and win market share from incumbent carriers. Caps on vertical services will also affect competitors' profits slowing innovation in telephony services. At the present time, the Commission has observed that incumbent carriers are often charging prices for nonbasic services that are 5 to 10 times higher than their costs and, in some cases, 100 times higher than their costs. Capping prices at these levels would not limit opportunities for competitors to enter the market profitably.

# Option C: Authorize and direct the Commission to hold a proceeding to rebalance costs into a structure that gives competitive providers the incentive to compete in residential and rural markets.

Most residential customers get a majority of their basic local services below cost. Rebalancing of rates would establish residential and rural rates that more closely, reflect the true costs of service. CLECs would have greater incentives to enter new markets in Texas with a wider range of sophisticated services for customers outside the large metro areas. Higher, rebalanced local rates would give local service providers much more economic headroom to deploy advanced telecommunications technologies and services for rural and residential customers.

This approach, however, has several drawbacks. After years of subsidized low rates, many customers would face increases in basic service rates as a result of rate rebalancing. Determining the proper, cost-based price for basic service in a given area would be difficult. Raising the rates for basic local services to meet costs might not permit competition anyway, as lower income and sparsely populated areas of Texas may never be profitable enough to attract competitors in traditional local service for reasons other than retail pricing.

### Option D: Combine Options B and C

Combine Options B and C for a comprehensive solution that includes the short-term protection of price caps and the long-term incentives of rebalancing prices to more fully reflect costs. The advantage of this approach is that any negatives associated with the moratorium on certain residential service prices under Option B can be evaluated and adjusted in the course of rate rebalancing. Furthermore, such a proceeding and its implementation are likely to take most of the two years of the Option B moratorium. The cap on prices may mollify negative public reactions that otherwise could result from higher prices, while allowing residential and rural customers to reap the benefits of a wider range of telephone services in the future.

While one of these approaches may be desirable, the Commission believes that long-term re-regulation of residential and rural markets should not be necessary. While monopoly power is still a factor in residential and rural markets at this time, new technologies appear to have the potential to stimulate vigorous competition in a number of parts of Texas in the years to come. Until then, the Legislature's price cap on traditional phone services serves as an appropriate customer protection.

# CHAPTER 1: LEGISLATIVE PARAMETERS FOR LOCAL COMPETITION

The beginning of local exchange competition in Texas is evident. Competitive telecommunications providers now have fair access to networks to provide local exchange service in Texas. Over the past two years, the Commission and interested parties have hammered out the details of a procedural and structural framework for local competition that gives competitors ready access to the Texas markets. The transformation is sufficient to firmly position Texas for the development of long-term, sustainable competition and for increased customer choices in telecommunications services.

Texas met the challenges of federal laws and regulations regarding local competition, which give state commissions great responsibility for their implementation. For example, state commissions must approve or reject agreements among competitors and incumbent providers to interconnect their networks, and they have primary responsibility for arbitrating and mediating such agreements if asked to do so by the negotiating parties. State regulators are also charged with developing and implementing cost-based prices for many provisions of interconnection agreements. While the basic blueprint for local competition is established on the federal level, the front line for implementation is the state level.

A number of the implementation developments in Texas are quite extraordinary, as reflected in the fact that they have been closely watched and are now routinely mirrored by other states. They are the result of contributions by many people representing many constituencies, including new market entrants, incumbent local telephone companies, the U.S. Department of Justice, the Federal Communications Commission (FCC), and the Texas Commission commissioners and staff. All shared a vision of a competitive future for telecommunications in Texas, although each viewed the details from different perspectives and interests. These entities contributed thousands of hours to deliberations and/or negotiations. The result is that many of Texas' nearly 20 million people have at least some choice in the provision of local telephone service.

How and why did we get here? Formative legislation at both state and federal levels set the stage for this transformation. Chapter 1 highlights the relevant history and directives of that the threshold legislation.

### **Key Legislation**

### TEXAS HOUSE BILL 2128 (A.K.A. PURA 95)

In 1995, the Texas Legislature adopted House Bill 2128 (HB 2128), which significantly amended the Public Utility Regulatory Act (PURA) with regard to telecommunications. It mandated the opening of local exchange telecommunications markets in Texas, particularly in areas served by Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated. The law provided a framework for competitive local exchange carriers (CLECs)<sup>1</sup> to obtain authority from the Commission to provide local exchange service through any of three avenues, including by building network facilities,<sup>2</sup> leasing local loops,<sup>3</sup> or reselling another company's telecommunications services.<sup>4</sup> Additionally, HB2128 established the duty of telecommunications providers to "interconnect" their networks with each other.<sup>5</sup>

### FEDERAL TELECOMMUNICATIONS ACT OF 1996

On February 8, 1996, Congress enacted the federal Telecommunications Act of 1996 (FTA),<sup>6</sup> which paralleled HB 2128 in numerous ways, and fundamentally changed telecommunications markets for the entire nation. The FTA was the most dramatic change in telecommunications law since Congress passed the Communications Act of 1934. Three principal goals established by the telephony provisions of the 1996 Act were (1) opening the local exchange and exchange access markets to competitive entry; (2) promoting increased competition in telecommunications markets that were already open to competition, including the long-distance services market; and (3) reforming the system of universal service so that universal service would be preserved and advanced as the local exchange and exchange access markets move from monopoly to competition.

### TEXAS SENATE BILL 560 AND SENATE BILL 86

The transition from monopoly to competition could not and did not occur quickly. In 1999, the Texas Legislature revised PURA by enacting two bills dealing with the provision of local exchange telephone service. SB 560 increased flexibility for incumbent local exchange companies (ILECs) in pricing and packaging telecommunications services. The Texas Legislature also passed SB86 to ensure customer choices and protections.

<sup>&</sup>lt;sup>1</sup> Perspectives on CLEC market share are discussed in Chapter 3. Certificated CLECs are listed in Appendix G.

<sup>&</sup>lt;sup>2</sup> PURA95 § 3.2531. The remaining part of this section is now in PURA Ch. 54, Subchapter C.

<sup>&</sup>lt;sup>3</sup> PURA95 § 3.453 (now PURA Ch. 60, Subchapter C). In addition, PURA95 § 3.453 (now PURA § 60.021) directed ILECs to unbundle their networks to the extent ordered by the FCC.

<sup>&</sup>lt;sup>4</sup> PURA95 § 3.453 (now PURA Ch. 60, Subchapter C).

<sup>&</sup>lt;sup>5</sup> PURA95 §3.458 (now PURA Ch. 60, Subchapter G).

<sup>&</sup>lt;sup>6</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (1996 Act). The 1996 Act amended the Communications Act of 1934. 47 U.S.C. §§ 151 et seq. (FTA).

## Key Features of the FTA

# THE TRILOGY: LOCAL COMPETITION, UNIVERSAL SERVICE, & ACCESS CHARGES

The FCC views the FTA as a trilogy, i.e. a three-pronged plan. The first prong of the trilogy consisted of opening local exchange and exchange access markets to competition. The FTA requires all local exchange carriers (LECs), not just incumbents, to interconnect so that competing carriers can provide service. The second prong of the trilogy is universal service reform. Consistent with FTA §254, Universal service, the FCC believes the universal service support system must guarantee affordable telephone service to all Americans in an era in which competition will be the driving force in telecommunications (see Appendix A). The third prong of the trilogy is access charge reform. Because a competitive market drives prices toward cost, the then-existing system of access charges was unsustainable because access charges were widely believed to be significantly higher than the cost of providing access (see Appendix B).

### METHODS OF COMPETITIVE MARKET ENTRY

The FTA §251(a)(1) requires all telecommunications carriers to interconnect with the facilities and equipment of other telecommunications carriers, allowing competitors three ways to serve customers.

- Resale Under this entry method, competitors have the option to purchase telecommunications services from another LEC at wholesale rates and resell those services to their own customers at retail rates. 10 Competitors often use resale as a transitional entry strategy while building a proprietary network over a period of months or years.
- Access of Unbundled Network Elements This entry method enables competitors to lease discrete parts of an ILEC's network facilities and equipment that are used to provide telephone service at cost-based rates. These leased parts of the ILEC network are referred to as "unbundled network elements" (UNEs). Competitors can combine leased UNEs with their own facilities and/or resold services.

<sup>&</sup>lt;sup>7</sup> Opening local markets was accomplished primarily through FTA § 251, Interconnection, and § 252, Procedures for negotiation, arbitration, and approval of agreements. Additionally, special provisions for opening local markets contained in FTA § 271, Bell operating company entry into interLATA services, pertain only to Bell Operating Companies.

<sup>&</sup>lt;sup>8</sup> FTA §251(a)(1).

<sup>&</sup>lt;sup>9</sup> Access charges are per-minute charges billed by LECs to long distance companies for access to the local exchange network so that long distance companies can originate and terminate long distance calls.

<sup>&</sup>lt;sup>10</sup> All LECs are required to make their telecommunications services available for resale pursuant to FTA § 251(b)(1). However, only *incumbent* LECs are required, pursuant to FTA § 251(c)(4), to make their retail telecommunications services available for resale at a wholesale discount.

Construction of New Facilities - A competitor may enter a local telephone
market by building entirely new facilities. Under a full "facilities-based"
method of entry, a competitor builds all of the network that it needs to serve
customers, including the "last mile" or "local loop" - the connection to a
customer's premise. Because telecommunications networks are capitalintensive, there are relatively few facilities-based carriers compared to the
number of resellers and UNE-based carriers.

### THE SECTION 271 "CARROT"

Section 271 of the FTA allows a Bell Operating Company (BOC) to enter the long distance market after the BOC proves that it has opened its local market to competition.

Bell Operating Companies were created in 1984 with the divestiture of AT&T, and were granted monopoly status to provide local service, subject to regulation by the states. At that time, BOCs were prohibited from competing in the interLATA long distance market to prevent them from committing anti-competitive practices against long distance providers.

Clearly, the FTA's requirement that the former monopoly BOCs open their networks to competitors, resulting in a loss in market share and power, was a tall order. Because entry into the long distance market would allow a BOC to offer its customers "one stop shopping," the Section 271 provisions created an incentive to BOCs to cooperate with the FTA mandate to open their networks to local competition.

### FEDERAL-STATE SHARED RESPONSIBILITY FOR IMPLEMENTATION

Implementation of the FTA has led to parallel proceedings at state and federal levels, covering similar issues, in similar time frames, affected by court challenges. Often, interplay across proceedings occurred.

The FTA's blueprint for encouraging local exchange competition placed great responsibility on the FCC and state commissions to implement the law.<sup>12</sup> Only six months after adoption of the FTA, the FCC produced two comprehensive documents charting a course for implementation. Some of the FCC's interpretations were challenged in federal court, and many of the FCC's interpretations of FTA requirements were affirmed. Where specific FCC findings were not affirmed, federal and state regulators adjusted through regulatory rule and other processes.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> In 1984, there were seven Regional BOCs, made up of a total of 29 BOCs.

Although the FCC establishes nationwide guidelines, state regulators play a major role in implementing key provisions of the FTA. For example, state Commissions must approve or reject interconnection agreements, and they have primary responsibility for arbitrating and mediating such agreements if asked to do so by the negotiating parties. State regulators are also charged with developing and implementing cost-based prices for interconnection and UNEs.

<sup>&</sup>lt;sup>13</sup> In its initial Order implementing the local competition provisions of the FTA in August 1996, the FCC established rules about how interconnection between incumbent and competitive carriers would be accomplished, how the competitors would be allowed to collocate equipment in the incumbent's structures,

Implementation of the FTA was and continues to be a phenomenal undertaking - the magnitude of which could not have been realized when the FTA was adopted. The web of multi-faceted and concurrent activities that produced the framework for and growth of local competition in Texas is a story told in Chapter 2.

which parts of the incumbent's network would be open to competitors, and through which states would be able to establish rates for competitors' interconnection. After the FCC released its ruling, several parties, including some state regulators, challenged the decision before the U.S. Court of Appeals for the Eighth Circuit. The Eighth Circuit overturned many of the FCC's rules on the grounds that the FCC had exceeded its authority and misinterpreted the Act. In early 1999, the U.S. Supreme Court issued a decision that noted that the Act was vague in some respects, affirmed the FCC's rulemaking authority to implement the local competition provisions of the Act, and upheld most of the FCC's rules. The case was sent back to the lower court for further proceedings consistent with the Supreme Court's decision. While court challenges raged on, state regulators and the FCC moved forward with the implementation of competition in local exchange markets.

# CHAPTER 2: THE IMPLEMENTATION STORY

The contested case in which Southwestern Bell Telephone Company (SWBT) sought the Commission's support to enter the long distance telecommunications market is often simply called "271" because the issue at hand was whether and how SWBT met the conditions set forth in Section 271 of the FTA. The case became longer and more complex than anticipated in the early stages, and grew to encompass developments in numerous concurrent proceedings.

While working through the ever-widening details, the 271 case moved a reluctant incumbent into a mode of cautious cooperation to make the local exchange service market accessible to competitors. The monopoly and its competitors were linked together by unavoidable technical, operational and legal issues, and persevered to engineer the beginning of local competition.

The FTA and Texas statutes<sup>14</sup> provided the initial directive and the basic components of a framework for implementing local exchange competition in Texas. The forum for implementing these laws became the 271 case. It is the centerpiece of the story, and where we begin this chapter. With hundreds of millions of dollars at stake, both for incumbents and new market entrants, the 271 case will perhaps have the most far-reaching effect on telephony of any single case in the Commission's history.

Chapter 2 tells the story of the 271 case and other regulatory developments of the past two years that are central to the framework of local exchange competition in Texas.

## **Implementation of FTA Section 271**

Section 271 is the section of the FTA that allows a Bell Operating Company (BOC) to enter the long distance market <sup>15</sup> after the BOC proves that it has opened its local exchange markets to competition from other local exchange providers. The long distance market was the carrot Congress dangled in front of the BOCs to encourage cooperation in opening local exchange markets to competition. <sup>16</sup> (The second-largest ILEC in Texas, GTE Southwest Incorporated, was also obligated to open its networks to competitors via interconnection agreements, but the Section 271 incentive to do so was not applicable since it was not a BOC). SWBT, eager to offer one-stop shopping to its

<sup>&</sup>lt;sup>14</sup> See FTA §§271 and 251, SB 560 and SB 86.

<sup>15</sup> In this context, the BOC is permitted to enter the in-region, interLATA long distance market. In other words, it is allowed to offer long distance service across LATA boundaries within its own region.

<sup>&</sup>lt;sup>16</sup> The BOCs were created in 1984, as a result of the divestiture of AT&T, and were granted exclusive franchises to provide local service, subject to regulation by the states. At that time, BOCs were prohibited from competing in the interLATA long distance market.

Texas customers, was the second BOC in the U.S. to meet the requirements of Section 271.<sup>17</sup>

The FTA obligated SWBT to open its network to local competition regardless of its interest in becoming a competitor in the long distance market. However, because SWBT, the BOC of Texas, was quick to initiate its application to enter the Texas long distance market, SWBT's 271 proceeding became the venue where the implementation issues for other FTA provisions were identified, negotiated, and resolved.

### SWBT's 271 APPLICATION

On March 2 1998, SWBT delivered its *Notice of Intent to File Section 271* Application for interLATA Authority in Texas (the 271 application) to the Commission.<sup>19</sup> To support the application, forty-seven affidavits were provided by dozens of SWBT witnesses, including the economist Alfred Kahn, to argue that SWBT's application met the requirements of Section 271 of the FTA and was in the public interest. The Commissioners presided over a lengthy hearing. CLECs alleged, through dozens more affidavits, that SWBT had engaged in anti-competitive and discriminatory behavior, thwarting their efforts to enter local exchange markets. SWBT responded to some allegations and denied others.

After the hearing concluded, the Commission found that SWBT had done much to open the local market to competition. Nevertheless, the Commission determined that SWBT's application did not fully comply with the requirements of Section 271 of the FTA. While denying the application, the Commission gave SWBT recommendations on how to meet the requirements of Section 271 (sometimes referred to as the "roadmap"). The first and most important recommendation was to establish a collaborative process to address all issues in dispute. Through the collaborative process, agreement eventually was reached between the parties on 129 specified issues.

### WHAT SWBT HAD TO PROVE

Section 271 of the FTA requires a BOC to establish the following before it is allowed to offer long-distance services.

• the presence of a facilities-based competitor providing local service to residential and business customers under an Interconnection Agreement

<sup>&</sup>lt;sup>17</sup> Bell Atlantic, the BOC for New York state, was the first to gain FCC approval to provide inregion interLATA long distance. Bell Atlantic has since merged with GTE to form Verizon.

<sup>&</sup>lt;sup>18</sup> FTA § 251 requires a BOC to open its network to local competition by developing agreements with competitors to "interconnect" its network with the competitors' networks (pursuant to interconnection agreements). The arbitration provisions included in § 252 for achieving the § 251 interconnection mandate, combined with the fact that interconnection was a threshold condition in § 271 for a BOC to enter the long distance market, created the result in Texas that many of the specific terms and conditions necessary to fulfill the § 251 mandate were actually negotiated in the context of SWBT's § 271 proceeding. (See "FTA Sections 251 and 252" subsection of this chapter.)

<sup>&</sup>lt;sup>19</sup> Pursuant to § 271, a BOC files its notice of intent with the state regulatory agency first and, only after receiving support from state regulators, files an application with the FCC for approval.

pursuant to FTA Section 252<sup>20</sup> or a statement of generally available terms and conditions:

- that it is providing the 14 "checklist" items:<sup>21</sup>
- that the BOC's entry into the long distance market is consistent with the public interest, convenience, and necessity; and
- that the provision of long distance service meets the separate affiliate and nondiscriminatory safeguards requirements of FTA Section 272.

### THE COLLABORATIVE PROCESS

basis to meet this Section 271 requirement.

The collaborative process was the term coined to describe a series of round-table, face-to-face discussions held with all interested

parties present and commission staff facilitating. Not only did ILECs, CLECs and the Commission staff participate in the collaborative process, but representatives from the U.S. Department of Justice also participated at pivotal points in the negotiations.

The collaborative process proved to be a successful forum for bridging philosophical and operational chasms. For more than nine months, dozens of 'collaborative work sessions' were held to hammer out the minutiae of opening local markets. This effort culminated with the Commission's approval of a Memorandum of Understanding on April 29, 1999 and approval of the Texas 271 Agreement (T2A) on October 13, 1999. Finally, on December 16, 1999, upon review of actual wholesale performance data, the Commission determined that local markets were irreversibly open to competition in Texas and, therefore, voted to send a recommendation to the FCC supporting SWBT's Section 271 application. To reach its conclusion, the Commission determined that SWBT's application and commercial performance met the requirements of Section 271 of the FTA. Similarly, the Department of Justice later supported the application. The FCC concluded that local markets were irreversibly open to competition

# <sup>20</sup> The Texas 271 Agreement (T2A), discussed later in this chapter, was developed in compliance

with FTA Section 252. The fact that several competitors signed a T2A agreement with SWBT gave SWBT

### THE 14-POINT CHECKLIST

- 1. Interconnection
- Access to UNEs
- 3. Access to poles, ducts, conduits and rights-of-way
- 4. Unbundled local loops
- 5. Unbundled local transport
- 6. Unbundled local switching
- 7. Access to 911, directory assistance, and operator services
- 8. White pages directory listings
- 9. Access to telephone numbers
- 10. Access to databases and associated signaling
- 11. Number portability
- 12. Local dialing parity
- 13. Reciprocal compensation
- 14. Resale

<sup>&</sup>lt;sup>21</sup> Of these items, the most difficult to resolve were No. 1, Interconnection, including trunking and collocation issues; No. 2, Access to UNEs, especially as pertained to the non-discriminatory provision of UNE combinations and the provision of operations support systems; and No. 4, Unbundled local loops, especially as pertained to xDSL and hot cut loop provisioning.

<sup>&</sup>lt;sup>22</sup> Before determining if approval should be given, the FCC is required to consult with the relevant state commission. The FCC depends upon the state commission to develop a detailed and extensive factual record and to resolve all factual disputes.

and, thus, approved SWBT's 271 application on June 30, 2000. SWBT began offering interLATA long distance to its local exchange customers on July 10, 2000.

### PERFORMANCE MEASURES

State and federal directives require that an ILEC may not unreasonably discriminate against another provider, with numerous specific prohibitions.<sup>23</sup> The critical, market-opening provisions of FTA Section 251 are incorporated in FTA Section 271 as conditions for a BOC to enter the long distance market. In particular, the BOC must demonstrate that it is offering interconnection and access to network elements on a nondiscriminatory basis. A BOC must provide parity access that is equal to the level of access that the BOC provides itself, its customers, or its affiliates, in terms of quality, accuracy, and timeliness. For the functions that have no retail equivalent, the BOC must demonstrate that the access it provides to competing carriers would offer a meaningful opportunity to compete.

To ensure that parity and meaningful opportunity to compete would be ongoing after 271, the Commission implemented performance measures. During the mega-arbitrations conducted in 1997 and 1998,<sup>24</sup> issues related to performance measures were highly disputed, but 66 performance measures were established.

During the 271 proceeding this biennium, new issues became the subject of dispute and generated the development of more performance measures. A CLEC coalition that included CLECs that did not participate in the mega-arb identified processes and activities not captured by the first performance measures, including the need for a remedy plan when SWBT fails to meet the measures. The Commission used the collaborative process to address such interests and to fine-tune the performance measurement system based on the experience in the market place.

Performance measures now number 132. A critical policy decision was made to break down each measure by geographic region of the state in order to ensure that the standards are not ignored in some areas by a company and averaged out by high performance in other regions.<sup>25</sup> The major categories of performance measures to be met in each region (further broken down by service) are pre-ordering, ordering, provisioning, maintenance, collocation, and database accuracy.

Concurrent with establishment of standards by the collaborative process, the Commission approved a Performance Remedy Plan. The Plan is two-pronged:

<sup>&</sup>lt;sup>23</sup> Specifically, an ILEC may not unreasonably discriminate against another provider by refusing access to the local exchange; refusing or delaying interconnection; degrading the quality of access; impairing the speed, quality, or efficiency of the line used by the provider; failing to fully disclose in a timely manner all available information necessary to design equipment to meet specifications of the network; or refusing or delaying access by a person to another provider. PURA § 60.161.

<sup>&</sup>lt;sup>24</sup> See Appendix K.

<sup>&</sup>lt;sup>25</sup> SWBT must meet the performance measures in each of the following geographic regions of Texas in which it operates: (1) Houston, (2) Dallas Fort Worth, (3) Central and West Texas, and (4) South Texas.

- Tier 1 measures are those that are "customer affecting." If it fails such a measure (allowing for statistical variance), SWBT pays the CLEC liquidated damages to compensate for substandard performance.
- Tier-2 measures are both "competition and customer affecting," and therefore are subject to assessments payable to the Texas State Treasury in the event the performance delivered to CLECs is non-compliant for three consecutive months. The goal of Tier-2 is to incent parity performance and disincent anti-competitive behavior; that is, to make the cost of non-compliance more than the "cost of doing business."

Payment amounts are classified as high, medium, and low based on the measures' impact on CLECs and competition. SWBT is required to file monthly performance measure reports on a password protected Internet site. Payments are due 30 days from the report date. By the end of October 2000, SWBT made \$4.2 million in payments for non-compliance with performance measure standards. This total reflects good performance in light of the fact that the annual cap for tier-1 liquidated damages and tier-2 assessments is set at \$298 million.

### THE TEXAS 271 AGREEMENT (T2A)

For SWBT to qualify under Section 271 and for CLECs to be able to compete, there must be interconnection agreements with ILECs in all areas in which they wish to compete. The process of individually negotiating agreements was time consuming and very costly. During the collaborative process, most such agreements were about to expire, leaving no guarantee of sustainable competition. The Commission and SWBT negotiated an interconnection agreement that complied with the FTA. As a condition of receiving 271 approval, SWBT agreed to offer that standard interconnection agreement to all CLECs for a period of four years. The creation of this Texas 271 Agreement, or T2A, reflects pro-competitive policies and terms that few CLECs could have negotiated on their own. The T2A is being widely replicated as a standard interconnection agreement in other states. The T2A is a comprehensive contract including in part:

- A performance remedy plan with 132 performance measures relating to all aspects of SWBT's wholesale operations. The performance measures are reviewed by the Commission staff every six months and refined, to the extent necessary.
- Prices, terms and conditions for resale, interconnection and the use of UNEs (individually and in combination). As reflected in the T2A, SWBT agreed during the collaborative process to provide combinations of UNEs, including in part the unbundled network element platform for existing and new lines and Enhanced Extended Loops.
- Specific provisions for Digital Subscriber Line (xDSL) service, although DSL needs were not anticipated when the 271 process began in 1998.<sup>26</sup>

<sup>&</sup>lt;sup>26</sup> DSL is a high-speed digital service that appeals to a significant number of customers in Texas. xDSL refers to a generic version of DSL.

- Operations Support Systems (OSS) OSS refers to the systems, databases, and personnel that ILECs use to provide service to their customers. SWBT demonstrated that its OSS systems provide CLECs with parity or a meaningful opportunity to compete.
- Hot Cut Loop Provisioning—Hot cut loop provisioning is used when a CLEC owns
  its own switch and purchases a UNE loop from SWBT in order to convert a SWBT
  customer to a CLEC customer. In that situation, the loop must be disconnected from
  SWBT's switch and connected to the CLEC's switch. SWBT agreed that service
  disruptions that affect end use customers would be minimized.

### COLLOCATION

To establish a pro-competitive policy framework for telecommunications, one of the FTA's core provisions requires ILECs to provide for physical collocation of equipment needed for interconnection or access to UNEs at the premises of the ILEC. The rates, terms, and conditions of the collocation must be just, reasonable, and nondiscriminatory. If it is shown that physical collocation is not practical, virtual collocation may be provided. In a physical collocation arrangement, a competitor leases space at an ILEC's premises for its equipment. The CLEC has physical access to this space to install, maintain, and repair its equipment. In a virtual collocation arrangement, the CLEC designates the equipment to be placed at the ILEC's premises, but does not have physical access to the incumbent's premises. Instead, the equipment is under the physical control of the ILEC, which is responsible for installing, maintaining, and repairing equipment designated by the CLEC.

The FCC's rules require ILECs to provide physical collocation on a "cageless" basis. In a "caged" physical arrangement, a CLEC leases and has direct physical access to caged space at an ILEC structure for its equipment. Cageless physical collocation eliminates the cage surrounding the CLEC's equipment. FCC rules also require ILECs to provide "adjacent" physical collocation, in which the CLEC's equipment is located within a vault or similar structure that the CLEC or its contractor constructs on property leased from the ILEC.

Early versions of interconnection agreements in Texas required CLECs to obtain "caged" collocation. The T2A and collocation tariffs developed during the collaborative process resulted in an obligation by SWBT to provide cageless collocation under some of the most aggressive terms and timeframes in the nation.

### Post-271 Activities

While Section 271 approval was initially a powerful incentive for SWBT to cooperatively open its local exchange markets to competition, the Commission recognized that lasting customer/supplier business relationships are needed to sustain local competition. In that regard, the Commission established a number of structured processes to foster the development of a healthy provider-customer relationship between SWBT and CLECs.

As part\_of the collaborative process, SWBT committed to participate in forums designed to address specific areas of potential concern. SWBT agreed to a trunking users group, a change management process and working group, an xDSL working group, and a general users group. Also, in recognition of the fact that operational issues between companies often need immediate attention, the Commission established Project No. 21000 to allow CLECs or SWBT to file a request for expedited, informal dispute resolution.

- Trunking Forum. The trunking forum was established as one vehicle for addressing trunk blockage problems. Through the trunking forum, SWBT and CLECs share in network planning. The trunking forum meets on a regular basis, with Commission staff participation, to ensure that adequate planning will forestall blockage problems.<sup>27</sup>
- Change Management Process. The change management process controls the dynamic environment of OSS systems using a negotiated document, Interface Change Management Process: SWBT and Competitive Local Exchange Carrier. The change management document outlines processes for accomplishing changes to existing network interfaces, introducing new interfaces, retirement of existing interfaces, and testing. The document also explains each outstanding issue solution and the process for a "go/no go" vote before release of a process change.
- DSL Working Group. The DSL working group establishes competitively
  neutral spectral compatibility standards and spectrum management rules and
  practices for deployment of loop technology absent national industry
  standards.
- General Users Group. SWBT and the CLECs formed a general users group to address issues other than trunking, DSL, and OSS. The Commission also has developed an informal resolution process to address post-interconnection agreement disputes resolution process to expeditiously handle issues not mutually resolved by SWBT and its wholesale customers.
- Performance Measure Review. Finally, SWBT, CLECs and commission staff conduct a review of the performance measurements every six months to ensure that they continue to adequately measure SWBT's provision of wholesale telecommunications service to CLECs. In August of 2000, the Commission completed its first six-month review and approved changes to the performance measures and the Performance Remedy Plan. Commission staff members monitor SWBT's performance data on a monthly basis to determine whether SWBT continues to provide CLECs with parity performance<sup>28</sup> or a meaningful opportunity to compete. Telcordia, the third-

The meetings are taped; the audiotape and agenda of each meeting is filed in PUC Project No. 20400.

<sup>&</sup>lt;sup>28</sup> In this context, parity means that SWBT's provision of services to CLECs must be equivalent to the services SWBT provides to itself and its affiliates.